

Andrew Frisbie
Wabash National Corporation
P. O. Box 6129
Lafayette, IN 47903-6129

Re: 157-13741-00061
Minor Permit Revision to
MSOP 157-3441-00061

Dear Mr. Frisbie:

Wabash National Corporation was issued a minor source operation permit (MSOP) on May 11, 1994 for a truck trailer repair operation located at 2700 State Road 25 North, Lafayette, IN 47905-3964. A written request to revise the source was received on December 28, 2000. The request was made to add a paint booth and an abrasive blasting booth. Pursuant to 326 IAC 2-6.1-6 a minor permit revision is hereby approved as described in the attached Technical Support Document.

The revision consists of

The following construction conditions are applicable to the proposed project:

1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating this minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this permit revision which includes this letter, the attached operating conditions applicable to these emission units, and revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Allen R. Davidson at (800) 451-6027, press 0 and ask for extension 3-5693, or dial (317) 233-5693.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
ARD

cc: File - Lafayette County
U.S. EPA, Region V
Lafayette County Health Department
Air Compliance Section Inspector - Eric Courtright
Compliance Data Section - Melinda Jones
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Wabash National Corporation
Source Location:	2700 State Road 25 North, Lafayette, IN 47905-3964
County:	Lafayette
SIC Code:	7538
Registration No.:	157-13741-00061
Permit Reviewer:	Allen R. Davidson

On December 28, 2000, the Office of Air Quality (OAQ) received an application from Wabash National Corporation relating to the construction and operation of a truck trailer repair shop to be located at 2700 State Road 25 North, Lafayette, IN 47905-3964. This emission source consists of the following facilities:

- (a) One (1) abrasive blasting booth, identified as BB1, using ferrous aluminum silicate as the blasting media.
- (b) One (1) paint spray booth, identified as PB1, with particulate emissions controlled by dry filters.

History

Wabash National Corporation was issued a construction permit for this location on May 11, 1994, but the facilities approved by that permit were removed from operation in 1998. Therefore, this source is being treated as a new emission source for purposes of this review.

Enforcement Issues

There are no enforcement actions pending against this emission source.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
PB1	Paint Booth	30	3	23000	65

There is no stack associated with the abrasive blasting booth.

Recommendation

The staff recommends to the Commissioner that the application be approved as a registration. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 28, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations. (3 pages)

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

The following table reflects the new source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

Pollutant	Potential To Emit (tons/year)
PM	18.4
PM-10	18.4
SO ₂	0
VOC	21.9
CO	0
NO _x	0

HAP's	Potential To Emit (tons/year)
Xylene	9.39
Toluene	1.76
Methyl Ethyl Ketone	0.26
Ethyl Benzene	1.34
Glycol Ethers	0.96
TOTAL	13.71

The potential to emit volatile organic compounds (VOC) and particulate matter (PM) are each less than 25 tons per year, but VOC is greater than ten tons per year and PM is greater than five tons per year. Therefore, the source is classifiable as a registration under 326 IAC 2-5.1.

This source is not a major source for Prevention of Significant Deterioration, 326 IAC 2-2. No attainment regulated pollutant has the potential to emit at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Actual Emissions

This is a new emission source. No previous emission data has been received from the source.

County Attainment Status

The source is located in Lafayette County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lafayette County has been designated as attainment or unclassifiable for ozone.

Lafayette County has also been classified as attainment or unclassifiable for all other pollutants. Therefore, all emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it does not have the potential to emit more than one hundred (100) tons per year of any pollutant specified in the rule.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Paint Spray Booth

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

This facility is not subject to 326 IAC 8-2-9. The source conforms to the definition of an "automobile refinishing" operation, as defined in 326 IAC 8-10-2(5). This definition includes mobile equipment such as truck trailers. Automobile refinishing is expressly exempted from 326 IAC 8-2-9.

326 IAC 8-1-6 (General VOC Reduction Requirements)

This facility is not subject to 326 IAC 8-1-6 (General Reduction Requirements) because the potential to emit volatile organic compounds is less than twenty-five (25) tons per year. Therefore, the BACT (best available control technology) requirements do not apply.

326 IAC 6-3-2 (Particulate Emissions Limitations)

This facility is subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

A particulate control device is not required to comply with this limit. See Appendix A of this document for detailed emissions calculations.

State Rule Applicability - Abrasive Blasting Booth

326 IAC 6-3-2 (Particulate Emissions Limitations)

This facility is subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 1.53 tons per hour, this equation provides an emission limit of 5.45 pounds per hour. A particulate control device is not required to comply with this limit. See Appendix A of this document for detailed emissions calculations.

Conclusion

The construction and operation of this emission source shall be subject to the conditions of the attached registration, No 157-13741-00061.

Appendix A: Emissions Calculations

VOC and Particulate

From Surface Coating Operations

Company Name: Wabash National Corporation
Address City IN Zip: 2700 SR 25 N, Lafayette, IN 47903
ID: 157-13741-00061
Reviewer: Allen R. Davidson
Date: 04/11/01

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Lb VOC/gal solids	Transfer Efficiency
Centari Enamel (722A)	8.06	58.81%	0.0%	58.81%	0.0%	33.06%	0.72705	1.000	4.74	4.74	3.45	82.71	15.09	2.64	14.34	75%
Activator (793S)	9.09	21.24%	0.0%	21.24%	0.0%	74.19%	0.09131	1.000	1.93	1.93	0.18	4.23	0.77	0.72	2.60	75%
Enamel Reducer (8093)	6.74	100.00%	0.0%	100.00%	0.0%	0.00%	0.18249	1.000	6.74	6.74	1.23	29.52	5.39	0.00	ERR	75%
Xylene	7.30	100.00%	0.0%	100.00%	0.0%	0.00%	0.02055	1.000	7.30	7.30	0.15	3.60	0.66	0.00	ERR	75%

State Potential Emissions

Add worst case coating to all solvents

5.00

120.06

21.91

3.36

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used